UNITED STATES DEPARTMENT OF AGRICULTURE

Farm Service Agency Washington, DC 20250

For: State and County Offices

ArcGIS CLU Maintenance Tool Version 5.1.11 Improvements and Enhancements

Approved by: Deputy Administrator, Farm Programs



1 **Overview**

A Background

The ArcGIS CLU Maintenance Tool is used to create and maintain FSA's CLU data and various other GIS datasets as feature classes in ArcSDE/SQL geodatabases. Version 5.1.11 will be deployed to Field Offices starting in mid-October 2009.

B Purpose

This notice informs State and County Offices of new functionality and enhancements introduced with Version 5.1.11. Changes will be grouped by toolbar throughout the notice.

2 Getting Started With ArcGIS CLU Maintenance Tool Version 5.1.11

A ArcGIS 9.2

Version 5.1.11 is a customization of ArcGIS 9.2. ArcGIS 9.2 and FSA custom applications will be installed at the same time. The general feel and user interface will remain the same; however, projects will need to be recreated because of the version change. Other changes are highlighted in this notice.

B Database Changes and the FSA Data Updater

Version 5.1.11 introduces "Admin_State" and "Admin_County" code attributes in the Wetland Point layer, changes the "wetland expiration date" column to "wetland_certification_date", and adds a "wetland_label" column that contains abbreviated wetland label such as "W", "PC", etc. The CLU database now allows undetermined HEL (UHEL) as an acceptable attribute for HEL status. In the CRP table, time is dropped from the "expiration_date" column.

Before using Version 5.1.11 for the first time, users **must** first run the FSA Data Updater; users shall CLICK "Start" \rightarrow "USDA Applications" \rightarrow "Common Land Unit" \rightarrow "FSA Data Updater".

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2 Getting Started With ArcGIS CLU Maintenance Tool Version 5.1.11 (Continued)

B Database Changes and the FSA Data Updater (Continued)

Running the FSA Data Updater will make the database changes listed in this subparagraph.

Notes: The new "Admin_State" and "Admin_County" columns are automatically populated based on the dataset name and any currently null HEL record will be populated with UHEL.

Running the FSA Data Updater may be a lengthy process, and could possibly take an hour or longer to complete. The tool may appear to **not** be responding; however, do **not** exit out of the tool unless absolutely necessary until the process is complete.

3 CLU Maintenance Toolbar Improvements and Enhancements

A CLU Control Panel

The CLU Control Panel has been redesigned and now features tabs based on various data categories.

С	LU Control Panel	
	CLU Data Layers Imagery Web Services Other Layers Utilities Anno	
	CLU Layer: CLU.SDE.clu_a_or023 Switch	
	CRP Table: crp_t_or023	
	Wetland Layer: FSA_GIS_LAYERS.SDE.wet_p_or023	
	Close	

B GIS Servers/Mapping Services

Internet Map Services (IMS), Web Map Services (WMS), and ArcGIS Server services can be added through the Control Panel. It is no longer limited only to the APFO Geospatial Data Warehouse (GDW) service, but is limited by the USDA firewall. In the thin-client environment, a special port has to be opened for accessing outside web services.

Contents of Personal and File geodatabases, as well as layer (.lyr) files, can now be loaded through the CLU Control Panel "Other Layers" tab.

3 CLU Maintenance Toolbar Improvements and Enhancements (Continued)

C Farm/Tract Layers

The Farm/Tract Layer update functionality now resides on the CLU Control Panel "Data Layers" tab. The layers can also be added and removed from the project here. As such, the Open CLU Layer Toolbar on the Utilities Toolbar has been removed.

D Vertex Editor

The vertex editor has been redesigned to be more user friendly. Basic functionality remains the same, but has been moved from a toolbar into various context menus as follows.



E CLU Numbering – CLU Iterator and Merge Polygon Tool

The CLU number can now be changed through the CLU iterator. The iterator will default to the next available number within the tract. If necessary, users may enter a number lower than the default if it is not already in use on the tract. Zeroes, duplicates, and anything higher than the default are **not** allowed.

When merging polygons, the CLU number of the new polygon will be assigned the next available CLU number on the tract.

F Delete Multiple Features

Users can now select and delete multiple CLU features when using the Delete Features tool.



G Search CLU and Public Land Survey System (PLSS)

The Search CLU and PLSS tool now features search by CRP contract and search by producer tabs. In addition, users can choose an option to also automatically select wetland points within the selected set of CLU's.

3 CLU Maintenance Toolbar Improvements and Enhancements (Continued)

G Search CLU and Public Land Survey System (PLSS) (Continued)

Note: The search by producer functionality will **not** be available initially. A software patch will be added at some point after initial deployment to make this functionality usable. Land Use sites should be able to use this functionality upon initial deployment as IP addresses of Land Use machines are already authorized to go through the firewall.

H Version Refresh

The CLU Maintenance Toolbar now has a version refresh button. In multi-user editing sessions, a user can click this button to see updates that other users have made.

I CLU Editing and CRP

If CLU has an associated CRP record and is edited, users are given a warning that the CRP information will be deleted and a choice of whether or not to proceed.

4 Acreage Toolbar Improvements and Enhancements

A Circular Acreage Graphic

The Circular Acreage Graphic tool now functions independently of the CLU layer and is able to contain an entire CLU feature.

5 Wetland Toolbar Improvements and Enhancements

A Administrative State and County Codes

Users can now enter administrative State and county codes in the Wetland Attribute Form dialog box.

Attribute Form]	
Label:	W	_
Status:	Inventoried	
Acreage:	0	
State:	Oregon	•
County:	Grant	•
Admin State:	Oregon	-
Admin County:	Grant	•
Certification Date:	[10/ 5/2009	•
	ОК	Cancel

5 Wetland Toolbar Improvements and Enhancements (Continued)

B Move Wetland Points

Users can now spatially modify existing wetland points using the Move Wetland Point tool •••• on the Wetlands Toolbar.

C Bulk Attribute Wetland Points

Users can now bulk attribute wetland points information, with the exception of acreage,

using the Bulk Attribute Wetland Points tool on the Wetlands Toolbar.

6 CRP Toolbar Improvements and Enhancements

A Bulk Attribute CRP Data

Users can now select multiple CLU's and bulk attribute the CRP table with the same contract number, expiration date, and predominant practice as necessary using the Bulk Attribute CRP

tool in the CRP Toolbar. The Bulk Attribute CRP tool will **not** allow the user to bulk attribute the CRP contract number if CLU's from more than 1 tract are selected. Expiration date and predominant practice can be bulk attributed regardless of the tract numbers of the selected CLU's.

7 Layout Toolbar Improvements and Enhancements

A Toggle Selected Features

The Toggle Selected Features/All Features tool on the Layout Toolbar now automatically toggle selected CLU and wetland features at the same time.

B Map Maker Functionality

Map Maker functionality has been expanded. Map books can be created based on producers, farms, or tracts at the desired scale level with various options, such as labeling CRP and indicating noncropland. All CLU, wetlands, and annotation are toggled automatically. A map maker wizard interface guides users through the map creation process.

Note: The Map by Producer functionality will **not** be available initially. A software patch will be added at some point after initial deployment to make this functionality usable. Land Use sites should be able to use this functionality upon initial deployment as IP addresses of Land Use machines are already authorized to go through the firewall.

8 Quality Control (QC) Toolbar Improvements and Enhancements

A UHEL and QC Tools

As stated in subparagraph 2 B, UHEL is now an acceptable attribute in the CLU database. QC tools have been modified as necessary to accommodate this change.

9 Utilities Toolbar Improvements and Enhancements

A Inventory Tools Changes



Inventory layers can be created as a feature class in an existing personal or file geodatabase.

Line geometry is now an available option for inventory layers.

A vertex editor has been added for line and polygon inventory layers.

Users can now spatially modify points in an inventory point layer.

B Subset Tool – Image Type

When using the Subset tool , users can export imagery as a jpeg. Previous versions offered tiff as the only option.

C Update Comments

The Update Comments tool has been enhanced so that users can search for and replace text strings within individual comments.

D Cropland Acres Tool

The Cropland Acres tool now includes CRP acreage for the farm or tract.

The farm number is included when the user chooses to summarize by tract.

The "CrpAcres" column has been changed to "CropAcres" to avoid confusion with CRP.

E Data Exporter

The Data Exporter tool in the Utilities Toolbar now exports wetlands and CRP data. The file names are defaulted to the standard CLU, wetlands, and CRP naming conventions.

9 Utilities Toolbar Improvements and Enhancements (Continued)

F In/Out Transfers

The time that the out-transfer was executed through the Maintenance tool has been added to the naming convention of the zip file and the shapefile created by the Out-Transfer tool.



The In-Transfer tool will no longer allow users to import polygons with farm and tract numbers that exist in the in-transfer or receiving county. Users will be prompted to provide new farm and tract numbers.

G Geoprocessing

Basic geoprocessing functionality is now available on the Utilities Toolbar, including buffer, dissolve, merge, clip, intersect, and union.

GT▼			
Buffer			
Clip			
Dissolve			
Intersect			
Mer	ge		
Union			

10 Annotation Improvements and Enhancements

A Multiple Annotation Layers

Users can now load multiple annotation layers into a project through the CLU Control Panel.

B Rotate Multiple Annotation Features

Multiple annotation features can be selected and rotated simultaneously using the Rotate

Annotation tool.

C Unstacked Annotation Features

If annotation is "unstacked" on a feature and the feature is edited, the resulting annotation remains unstacked.

10 Annotation Improvements and Enhancements (Continued)

D Annotation Select Tool

The Annotation Select tool now has an "Add Criteria" button to enter the initial query.

The user can run a query on multiple annotation layers.

Read-only users can now use the Annotation Select tool.

Annotation Sele	ct		
Query Layer Field Name Clu_Number	CLU.SDE.anno_custom_ CLU.SDE.anno_custom_ CLU.SDE.anno_custom_ Operator	2_an_or025 2_an_or025 1_an_or025 Value List All Possible Values	Append to Citteria Dox And O Or Add Criteria Clear Criteria
Select Criteria	a Save Criteria	• none •	Save Delete
Select Annotation	Reset All Innotation	🔲 Edit Criteria	Clear Screen Cancel

E Annotation Pre- and Post-Text

Using the FSA Annotation Creator, pre- and post-text can be added to existing annotation layers, and can be created as part of new annotation layers.

11 Bug Fixes

A Attributing Acreages Less Than 1 Acre

The issue at Maintenance Tool Version 4.2.5 about the inability to add fractional acreages in the various data entry windows has been resolved.

B Issue With CRP Table Being Joined

Issues with errors caused by joining the CRP table to the CLU table at Maintenance Tool Version 4.2.5 have been resolved.

C Bulk Attribution

Bulk attribution will no longer cause an ActiveX error if annotation is selected.

D Select Annotation and Toggling

An annotation query created by the Select Annotation tool after is now retained after using the toggle function on the Layout Toolbar.

E Vertex Editor

Users can now add vertices to a line without having to move the vertices to save the edits. Previous versions of the Maintenance tool required the user to spatially modify the vertices to save.

F Wetland Points

The dataloader can now load as many wetland points as exist in any given county.

12 Accessing the User Guide and Announcements

A User Guide

The User Guide is available on the GIS SharePoint site at **https://fsa.sc.egov.usda.gov/mgr/GIS/default.aspx**; CLICK "**Training**" tab, then under "Documents", CLICK "**Application Documents**", under "Actions" CLICK "**ArcGIS**", and under "Actions" CLICK "**Maintenance**".

B Announcements

User guides are occasionally updated before, during, and after the deployment process. Announcements will be made on the SharePoint site as updates occur.

Note: SharePoint users must set up an alert to receive automatic announcements.

To access announcements, go to the GIS SharePoint site at https://fsa.sc.egov.usda.gov/mgr/GIS/default.aspx; CLICK "Training" tab.